



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/846,368

05/02/2001

Dan Carlsson

2447-14

3935

7590

12/29/2004

Nixon & Vanderhye, P.C.
8th Floor
1100 North Glebe Road
Arlington, VA 22201-4714

EXAMINER

NGUYEN, STEVEN H D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

fr

Office Action Summary	Application No. 09/846,368	Applicant(s) CARLSSON, DAN	
	Examiner Steven HD Nguyen	Art Unit 2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
 4a) Of the above claim(s) 28-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-16, 19-27 and 39-41 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/2/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed on 5/2/2001. Claims 28-38 have been canceled and claims 1-27 and 39-41 are pending in the application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 5, 17 and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As claim 5, "the upstream loop back buffer" is not referred to any previous element.

Claims 5 and 17, the recitation "*from the processor to . . . the processor*". It is unclear how the cells route from the processor to the processor. Please clarify, so the meter and boundary of the claim can be determined.

Claim 39, the recitation "wherein, in the downstream . . . *from external interface* . . . to *the external interface*". It is unclear how the cells route from the internal interface to the external interface. It is unclear, please clarify, so the meter and boundary of the claim can be determined.

As claim 39, lines 13, "devices to one of the external interface, to the processor" is vague and indefinite because it's unclear what it is constituted for. Please clarify, so the meter and

Art Unit: 2665

boundary of the claim can be determined. It seem the applicant has a type error because the amended claim is different with a version with marking.

There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-27 and 39-41 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6256308.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the application's claims merely broaden the scope of the claims by not claiming some elements (i.e such upstream loop back buffer in claim 1, downstream loop back buffer as claim 16 and the buffers as claim 39). The applicant is attempting to broaden the application's claims by eliminating some of the claim elements in the continuation at issue here. If allowed, the application at bar would unjustly extend applicant patent protection beyond the statutory period of the patent while, at the same time, granting broader protection to the application.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4, 7-10, 12, 15-16, 19-22, 24, 27, 39 and 42 rejected under 35 U.S.C. 102(e) as being anticipated by Tabu (USP 6560219).

Regarding claims 1, 4, 7-8, 12, 15-16, 19-20, 24, 27, 39 and 42, Tabu discloses a hardware multi-service circuit which receives information bearing cells on an external interface (Fig 26, Ref 824 and 823), the multi-service circuit being controlled by a processor (Fig 27, Ref 1300 is central controller), the multi-service circuit comprising plural service devices handling differing telecommunication services (Fig 15, Ref 3302 is ATM interface for using with ATM terminal and 3303 is STM interface for using with telephone; See Fig 4 and col. 15, lines 60 to col. 16, lines 47); a multiplexer and demultiplexer core (Fig 26, 2300) connected between the plural service devices and the external interface (Fig 26, Ref 824 is a downstream), the core having a downstream side for transmitting cells from the external interface to the service devices (Fig 26, Ref 824 and 830 is downstream) and an upstream side for transmitting cells from the service devices to the external interface (Fig 26, Ref 823 and 816 is upstream), the upstream side including an upstream multiplexer (Fig 26, Ref 822) and an upstream demultiplexer (Fig 26, Ref 816), the downstream side having a downstream demultiplexer (Fig 26, Ref 825) and a downstream multiplexer (Fig 26, Ref 830) where are distinct from the upstream multiplexer and

Art Unit: 2665

upstream demultiplexer, wherein the downstream demultiplexer serves to route cells received from the external interface either (1) to an input of the downstream multiplexer (Fig 26, the cell from ref 824 is route to input of the mux 830) or the upstream demultiplexer serves to route cells received from the service devices to a buffering section situated between the upstream demultiplexer and the upstream multiplexer (Fig 26, Ref 818 is buffer between the upstream mux and demux); See col. 24, lines 44 to col. 28, line 3 wherein the cell routes between the large unit and the service devices.

Regarding claim 2, Tabu discloses the downstream multiplexer serves to obtain cells from the downstream demultiplexer (Fig 26, Ref 830 receives the cells from Ref 825).

Regarding claim 3, Tabu discloses the downstream demultiplexer and the downstream multiplexer are capable of independent simultaneous operation except when cells are routed from the downstream demultiplexer to the downstream multiplexer (Fig 26, the mux and demux are independently operated simultaneous).

Regarding claims 9-10 and 21-22, Tabu discloses the emulator has a buffer which is either totally filled or partially filled with data from one or all channel(s) (Fig 15, Ref 519 for storing data from at least one channel of STM interface).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11, 13-14, 23, 25-26 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabu.

Regarding claims 11, 13-14, 23, 25-26 and 40, Tabu fails to disclose at least one of service devices is UTOPIA level 2 device for connecting to the ATM cell switch and a multi-service is integrated chip. However, Tabu discloses an ATM and CLAD interfaces for connecting to the ATM switch therefore, it would have been obvious to one of ordinary skill in the art to implement utopia level 2 interface for connecting the devices to the ATM switch for improving the throughput of the system by converting the serial data from the ports into a parallel signal and integrate the devices into a chip in order to reduce the size of the multi-service circuit.

Allowable Subject Matter

10. Claim 6 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

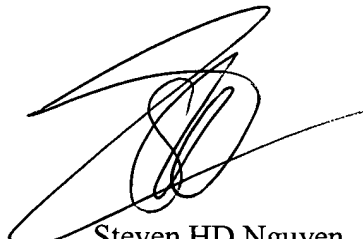
11. Claims 5 and 17-18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
12/21/04